

April 30, 2018

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Chief, Air and TRI Section
Enforcement Division
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street

San Francisco, California 94105

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Director, Air Enforcement Division Office of Civil Enforcement U.S. EPA Headquarters, MC 2242A 1200 Pennsylvania Avenue, NW Washington, D.C. 20460

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Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-10459

Re: United States v. Asarco

Consent Decree No. CV-15-02206-PHX-DLR Quarterly Report for the First Quarter of 2018

Presented below is Asarco's quarterly report for the first quarter of 2018, as required by paragraphs 55 and B.36 of the above-referenced consent decree. Consent Decree reporting requirements are in bold italics followed by the required report information.

Paragraph 55.a.i: Emissions and monitoring data and corrective action records, including the following:

(1) The results of any performance tests that were required by the Consent Decree;

Smelter Method 5 Performance Tests:

No Method 5 performance testing was conducted during the first quarter of 2018.

## Smelter Method 5B Performance Tests:

No Method 5B performance testing was conducted during the first quarter of 2018.

### Concentrator Method 5 Performance Tests:

No Method 5 performance testing was conducted during the first quarter of 2018.

## Flash Furnace, Converter, and Anode Buildings Opacity Performance Tests:

N/A. The due date for the submittal of a performance test plan per 40 C.F.R. § 63.1450(c) is 60 days after the completion of the converter retrofit project (CRP).

- (2) Copies of any Visible Emissions evaluations or records for which opacity was 4 percent or greater for the building housing the flash furnace, converters, and anode furnaces (to include date, time, and duration of the opacity);
- (3) A description of any corrective actions taken to address the opacity from the building housing the flash furnace, converters, and anode furnaces (to include the date and time such actions were commenced and completed), along with a description of the cause of the opacity;

Exceedance(s) of 4% opacity limit applicable to visible emissions from the flash furnace, anode furnaces, and converter and not yet superseded by requirements related to the installation of the long-path optical density monitors:

N/A. Dependent upon CRP completion.

### <u>Investigation(s)</u>, cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

- (4) Dates, times, and duration of each bag leak detection system alarm sounding, the cause of the alarm and the date and time that ASARCO commenced investigation of the baghouse, and a description of the corrective actions taken, if any, along with the date and time such corrective actions were completed;
- (5) The total alarm time for each bag leak detection system, as determined in accordance with subparagraph 26.a.v;

#### Total alarm time for each bag leak detection system:

The secondary hood baghouse had the following alarms during the first quarter of 2018.

Date	Time of Alarm	Total Duration of	Module Number
1/31/2018	17:48 - 17:51	Alarm (hours) 0.05	3

The anode baghouse had no alarms during the first guarter of 2018.

Exceedance(s) of alarm limit of no more than 5% of total operating time in any 6-month period:

Secondary Hood Baghouse: October 1, 2017 – March 31, 2018			
Total duration of bag leak detection system alarm hours			
Total hours of source operation			
Percent of time in alarm (operating hours)	0.001%		

Anode Baghouse: October 1, 2017 – March 31, 2018			
Total duration of bag leak detection system alarm hours			
Total hours of source operation			
Percent of time in alarm (operating hours)			

Note: The Hayden Smelter was down from March 10, 2018 through the end of March to tie in equipment relating to the CRP and annual maintenance activities. Additionally, the Hayden Smelter was down from October 30th through November 2<sup>nd</sup> and from November 4<sup>th</sup> through November 13<sup>th</sup> due to a concentrate feed shortage and process upset conditions. No processing equipment was operating during any of this time period.

## Investigation(s), cause(s) and corrective action(s) taken:

The alarm that occurred at the secondary hood baghouse on January 31, 2018 was caused by the start-up of the baghouse after a routine smelter maintenance down day. No corrective actions were necessary.

(6) Dates, times, and duration of any instances where pressure drop or scrubber liquid flow rates were outside the established ranges for those parameters, the date and time that ASARCO initiated investigation, the readings at the time of the issue, a description of the underlying cause for those readings, and a description and explanation of any corrective actions, including the date and time that such actions were commenced and completed;

Hourly (block) average pressure drop(s) and liquid flow rate(s) outside range established in most recent Method 5 test:

The hourly block averages outside the established range(s) are detailed in the enclosed compact disk.

### Investigation(s), cause(s) and corrective action(s) taken:

The investigation(s), cause(s) and corrective action(s) taken for each event are detailed in the enclosed compact disk.

### Times scrubber(s) not in service or believed to be malfunctioning:

The times that the scrubber(s) were not in service or believed to be malfunctioning are detailed in the enclosed compact disk.

(7) Dates, times, and descriptions of deviations from the gas capture parametric monitoring requirements and/or limits of Paragraph 9;

PRIMARY HOODING PARAMETER:

Failure(s) to achieve minimum air infiltration ratio of 1:1 during blowing when improved hood is operational averaged over 24 blowing hours rolled hourly:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

SECONDARY HOODING PARAMETER DURING BLOWING:

<u>Failure(s)</u> to achieve minimum exhaust rate of 35,000 SCFM at a converter averaged over 24 blowing hours rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

SECONDARY HOODING PARAMETER DURING NON-BLOWING:

Failure(s) to achieve minimum exhaust rate of 133,000 SCFM at a converter averaged over 24 non-blowing hours rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

SECONDARY HOODING PARAMETER WHEN HOOD DOORS ARE CLOSED:

<u>Failure(s)</u> to achieve minimum negative pressure drop across a hood of 0.03 mm of Hg (0.007 inches of water), unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

TERTIARY HOODING PARAMETER AT ALL TIMES MATERIAL IS PROCESSED IN COPPER CONVERTER DEPARTMENT:

<u>Failure(s)</u> to achieve minimum exhaust rate of 400,000 ACFM averaged over 24 hours of copper converter department material processing rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

(8) Dates, times, and descriptions of deviations when ASARCO operated the furnaces, capture systems, baghouses, R&R Cottrell, or any other equipment in a manner inconsistent with the approved Operations and Maintenance Plan;

N/A. The Hayden Operations Operation and Maintenance Plan was submitted to EPA on December 21, 2016. On February 22, 2017 Asarco received a letter from EPA disapproving the submitted Operation and Maintenance Plan. On April 10, 2017 Asarco submitted a revised Operation and Maintenance Plan to address EPA's comments. On March 20, 2018 Asarco received comments from EPA regarding the April 10, 2017 submitted Operation and Maintenance Plans. Asarco is currently working on revising the previously submitted Operation and Maintenance Plans and creating new Operation and Maintenance Plans for equipment listed in the approved Fugitive Dust Plan.

(9) Dates, times, and descriptions of deviations when ASARCO's material handling was carried out in a manner inconsistent with the approved Operations and Maintenance Plan and/or Fugitive Dust Plan;

OPERATION AND MAINTENANCE PLAN

The Hayden Operations Operation and Maintenance Plan was submitted to EPA on December 21, 2016. On February 22, 2017 Asarco received a letter from EPA disapproving the submitted Operation and Maintenance Plan. On April 10, 2017 Asarco submitted a revised Operation and Maintenance Plan to address EPA's comments. On March 20, 2018 Asarco received comments from EPA regarding the April 10, 2017 submitted Operation and Maintenance Plans. Asarco is currently working on revising the previously submitted Operation and Maintenance Plans and creating new Operation and Maintenance Plans for equipment listed in the approved Fugitive Dust Plan.

FUGITIVE DUST CONTROL PLAN

On March 15, 2018 EPA approved of the submitted February 2, 2018 version of the Fugitive Dust Plan. Asarco began implementing the inspection forms as specified in the approved Fugitive Dust Plan and implementing the work practices as specified. Asarco began the final engineering for the new water spray systems and hired a contractor to purchase specified water spray system equipment to be installed. All wind fence installations are expected to be completed by the end of May 2018. A request for proposal was submitted to several consulting firms to carry out the inactive facilities site and borrow material characterization and

final site engineering for the Soil Cover Plans and Vegetative Cover Plans as specified in the approved Inactive Facilities Closure and Vegetation Plan.

<u>Deviation(s)</u> from material handling requirements of approved fugitive dust control plan and corrective action(s) taken:

None during the first quarter of 2018.

Exceedance(s) of 15% Method 9 opacity limit on visible emissions from any source listed in the approved fugitive dust control plan (i.e., sources other than the furnaces and converter building) and corrective action(s) taken:

None during the first quarter of 2018.

Opacity readings outside major openings of secondary and tertiary crushers Total Enclosure or fine ore storage building in excess of minimum measurable opacity level over 6-minute period using long-path optical density monitors and corrective action(s) taken:

The fugitive dust plan was approved by EPA on March 15, 2018 and Asarco has 120 days after approval of the fugitive dust plan to install the open path opacity monitors outside of the secondary crusher and fine ore storage buildings. The new opacity monitors have been ordered but are not yet installed as of March 31, 2018.

<u>Event(s)</u> when DCS system recorded data outside of established operational parameters, investigation(s), cause(s), corrective action(s), and degree of success:

<u>Water Spray Systems Operational Parameters</u>: The fugitive dust plan was approved by EPA on March 15, 2018 and Asarco has 120 days to install the new water spray systems including the DCS communication capabilities. The DCS communication connections for the water spray systems are in the process of being installed.

<u>Camera Hill Meteorological Station Data:</u> The wind data is being continuously recorded on our contractor's database, but has not yet been incorporated in Asarco's DCS system and is in the process of being done.

<u>Acid Plant Scrubber Blowdown Solids Electric Dryer start/stop times</u>: Currently being recorded in the DCS. The Hayden Smelter was down from March 10, 2018 through the end of March to tie in equipment relating to the CRP and annual maintenance activities. The acid plant scrubber blowdown solids system did not operate during this time period.

<u>Concentrator Scrubber Parameters & Operational Run Times</u>: See enclosed scrubber alarm report for the first quarter of 2018.

<u>Refractory Brick Crusher Operational Parameters</u>: The refractory brick crusher did not operate during the first quarter of 2018. Water spray system DCS communication is currently in the process of being installed.

## Dates and times when DCS system was not recording data:

The fugitive dust plan was approved by EPA on March 15, 2018 and Asarco has 120 days to install the new water spray system including the DCS communication capabilities. The DCS communication connections are in the process of being installed.

#### AMBIENT MONITORING NETWORK

Ambient monitoring network raw data and calculated ambient levels for the first quarter of 2018 are enclosed with this report on a compact disc. Note on March 15, 2018 EPA approved of the submitted February 2, 2018 version of the Fugitive Dust Plan.

#### HIGH WIND EVENTS

High Wind Event data for the first quarter of 2018 is enclosed with this report on a compact disc. Note on March 15, 2018 EPA approved of the submitted February 2, 2018 version of the Fugitive Dust Plan.

(10) Dates, times, and descriptions (including emissions data) of any periods where ASARCO failed to meet an emission limit or an emissions control efficiency established under this Consent Decree;

#### ACID PLANT PM EMISSION LIMIT

Exceedance(s) of 6.2 mg/dscm limit as demonstrated through performance testing: None

SECONDARY HOOD BAGHOUSE EMISSION LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing: None

ANODE FURNACE BAGHOUSE PM EMISSIONS LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing: None R&R COTTRELL ESP PM EMISSIONS LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing: None COPPER CONCENTRATE DRYER PM EMISSIONS LIMIT

The copper concentrate dryer emissions are routed to the existing R&R Cottrell ESP. See above section regarding the R&R Cottrell ESP PM Limit compliance.

FLASH FURNACE TAPPING/SKIMMING EMISSIONS CAPTURE SYSTEM PM EMISSIONS LIMIT

The flash furnace tapping/skimming emissions capture system is routed to the existing R&R Cottrell ESP. See above section regarding the R&R Cottrell ESP PM Limit compliance.

PROCESS-WIDE TOTAL PM EMISSIONS LIMIT

The due date for beginning the use of a measuring system described in paragraph 24.a of the decree is June 1, 2019.

Exceedances of 0.6 lb PM per ton of concentrate smelted total PM limit(s):

N/A. Dependent upon CRP completion.

Investigation(s), causes(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

DUCON-TYPE WET SCRUBBER OPERATIONAL REQUIREMENTS

Exceedance(s) of 0.05 g/dscm limit: None

DRY LIME SCRUBBING OF SO₂ ROUTED TO SECONDARY HOOD AND R&R COTTRELL REPLACEMENT BAGHOUSES

Failure(s) to meet applicable control efficiency:

N/A. Dependent upon CRP completion.

<u>Investigation(s)</u>, <u>cause(s)</u> and <u>corrective action(s)</u> taken or status of demonstration of technical infeasibility of control efficiency:

N/A. Dependent upon CRP completion.

CORRECTIVE ACTION TRIGGERS FOR ACID PLANT

Date	Time of Trigger Level Alarm	Cause and Corrective Actions Taken if Necessary
		No trigger levels were reached during the first quarter of 2018.

SO<sub>2</sub> Emissions Limit for Gases Collected From the Converters

Exceedance(s) of applicable 650 ppmv limit for gases routed to acid plant or secondary hood baghouse or gases in the tertiary hood exhaust:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

(11) Dates, times and descriptions where ASARCO exceeded the Blowing rate limit set forth in Paragraph 8 and/or, for such time as the Blowing hour limit in Paragraph 8.b remains applicable, the Blowing hour limit;

Exceedance(s) of converter blowing limit of 32,000 SCFM averaged over 5 minutes of blowing and rolled each minute:

N/A. Dependent upon CRP completion.

TOTAL COMBINED BLOWING TIME OR SO2 LIMIT ON ACID PLANT TAIL GAS

Exceedance(s) of total combined blowing time limit at all converters of 21 hours per 24-hour period rolled hourly, unless Asarco accepts 100 ppmv SO<sub>2</sub> limit on acid plant tail gas:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

## ii. Status and/or completion of construction or compliance milestones;

CONVERTER RETROFIT PROJECT

The pre-commissioning of the new converter process gas electrostatic precipitator was started in December 2017 and was completed in January 2018. The construction for new converters # 4 and 5 mechanical systems is approximately 95% and all that remains is the final alignments and pre-commissioning testing. The pre-commissioning for the new converters is in progress and the hot commissioning is scheduled for April 2018. Existing converter #3's demolition began in January 2018 and the new converter #3 was set in place on February 26, 2018. The new converter blast air blowers pre-commissioning testing is on-going and the final commissioning is scheduled for April 2018. Currently the construction contractors are installing the electrical and instrumentation for the new converters and the primary and secondary ventilation systems. The tertiary ventilation system pre-commissioning is scheduled for March 2018. See also the PowerPoint presentation titled "Hayden CRP 1Q2018 Status" for additional information.

#### R&R COTTRELL ESP REPLACEMENT BAGHOUSE

Installation of the bucket elevator system, conveyors, bags and dust hoppers for the baghouse was completed during the quarter. The baghouse fan was tested in March 2018. The new CEM instrumentation was installed and construction continued for the CEM instrumentation building. The baghouse instrumentation, conduit, electrical cable trays and controls were installed during this quarter.

DRY LIME SCRUBBING OF SO<sub>2</sub> ROUTED TO BAGHOUSES

The instrumentation, conduit and controls were installed during this quarter.

PREPARATION OF FUGITIVE EMISSIONS STUDY PROTOCOL

Asarco selected SLR International Corp. to assist in preparing the fugitive emission study protocol. The protocol for the fugitive emission study was submitted to EPA for approval on June 15, 2016. Asarco received comments on the submitted protocol on December 5, 2016 and on January 20, 2017 Asarco submitted a revised fugitive emission study protocol addressing those comments. On May 31, 2017 Asarco received EPA's approval of the revised fugitive emissions study protocol.

IMPLEMENTATION OF APPROVED FUGITIVE EMISSIONS STUDY PROTOCOL

The due date for the commencement of the fugitive emissions study protocol for the initial study is 6 months after the completion of the converter retrofit project.

LONG-PATH OPTICAL DENSITY MONITORS SPECIFIED IN PROTOCOL

The due date for the installation of the three long-path optical density monitors at the building emission points specified in the fugitive emissions study protocol is 6 months after the completion of the initial fugitive emissions study.

# iii. Status of PM CEMS installation and PS-11 testing pursuant to Paragraph 14;

On March 8, 2017 EPA approved of the March 3, 2017 revised Installation, Certification and QA/QC Protocol for the PM CEMS. From May 8-12, 2017, the initial PS11 correlation testing was performed on the anode baghouse PM CEMS and the testing report was submitted on July 18, 2017. The SICK light scatter PM CEM was successfully certified and the Altech beta attenuation PM CEM was not successfully certified. On September 6, 2017, a revised PS11 Certification testing protocol for the Altech beta attenuation PM CEM located at the anode baghouse was submitted to EPA for review and approval. A conference call was held on October 3, 2017 between Asarco, EPA, and Asarco's PM CEMS vendors to answer EPA's questions on the September 6, 2017 revised PS11 Certification Protocol. Additionally, the PS11 certification re-test for the Altech beta-attenuation monitor occurred during the week of October 30, 2017. The results of the Altech beta-attenuation monitor showed that it passed the second round of PS11 correlation testing and the report was submitted to EPA on January 22, 2018. Additionally, Asarco notified EPA in the report cover letter dated January 22, 2018, that the Altech beta-attenuation monitor would be relocated to the new furnace vent baghouse during the March 2018 plant wide outage.

The PM CEMS located at the secondary hood baghouse and the acid plant tail gas stream were installed during the month of August 2017. The initial PS11 correlation testing for these two PM CEMS occurred during the weeks of October 2 – 13, 2017. The SICK light scatter monitor located on the secondary hood baghouse passed the initial PS11 correlation testing and the acid plant Altech beta-attenuation monitor did not pass the initial PS11 correlation testing. The reports for these tests were submitted to EPA on January 22, 2018. On March 2, 2018 Asarco submitted a protocol for the re-test of the acid plant Altech beta-attenuation monitor to EPA to review and approve. On March 14, 2018 EPA sent comments on the protocol and Asarco incorporated those changes in a revised testing protocol that was submitted to EPA on March 22, 2018. On March 29, 2018 EPA approved of the March 22, 2018 revised Acid Plant re-test protocol. The PS11 certification re-test is schedule to occur from June 4-8, 2018.

On March 16, 2018 Asarco submitted the new furnace vent baghouse and tertiary ventilation system's PM CEMS Installation, Certification, and QA/QC Protocol to EPA for review

and approval. On March 22, 2018 EPA submitted its comments on the March 16, 2018 protocol and Asarco is in the process of revising the protocol to incorporate the EPA's comments.

iv. Problems encountered or anticipated with Consent Decree compliance, together with implemented or proposed solutions;

None

v. Status of any permit applications pertaining to any of the requirements of this Consent Decree;

On May 5, 2017 Asarco submitted its replacement Title V Air Quality Control Permit Renewal application incorporating all of Paragraph 101 permitting requirements from the Consent Decree, and on May 12, 2017 Asarco submitted a copy of that permit application to the Paragraph 117 list of addressees as required. On June 23, 2017 Asarco submitted a revision to the May 5, 2017 Title V Air Quality Permit Renewal Application to ADEQ, and on June 26, 2017 Asarco submitted a copy of those revisions to the Paragraph 117 list of addressees as required. Asarco and ADEQ have regularly scheduled conference calls to facilitate the permitting process. On September 26, 2017, Asarco submitted a letter to EPA requesting clarification on the inclusion of the Fugitive Dust Plan into the Renewal Title V Air Permit. On December 19, 2017 Asarco received a clarification letter from EPA on how best to incorporate the Fugitive Dust Plan provisions in the Title V Renewal Air Permit. On December 27, 2017 Asarco submitted a revision to the May 5, 2017 Title V Air Quality Permit Renewal Application to ADEQ, and Asarco submitted a copy of those revisions to the Paragraph 117 list of addressees as required on that same day. ADEQ held a 30-day public comment for the Hayden Operation's Renewal Title V Air Quality Permit No. 39948 which began on January 10, 2018 and ended February 8, 2018. A public hearing was also held on February 8, 2018.

ADEQ addressed all public comments received and revised the draft renewal permit accordingly and submitted to EPA for review. ADEQ received some comments from the EPA on February 23, 2018 and addressed those comments accordingly. On March 14, 2018 ADEQ submitted the final draft permit to EPA for approval. On March 23, 2018 ADEQ issued a letter granting the Hayden Operation's Title V Renewal Air Quality Permit No. 39948 which will be issued upon Asarco submitting payment of final permitting fees to ADEQ.

vi. The status of the SEP under Section VIII and Appendix C including, at a minimum, a narrative description of activities undertaken; and

On March 13, 2018 an order was placed for the new diesel-electric switch locomotive. The due date for purchasing and operating the new diesel-electric switch locomotive is December 30, 2018.

vii. The status of the Environmental Mitigation Projects under Section VII and Appendix A including, at a minimum, a narrative description of activities undertaken; status of Environmental Mitigation Project milestones set forth in Appendix A; and a summary of costs incurred since the previous report.

PINAL COUNTY ROAD PAVING ENVIRONMENTAL MITIGATION PROJECT

On March 3, 2017 EPA submitted a letter to Asarco approving the revised Pinal County Road Paving Mitigation Project. Asarco set up an account with Pinal County for the mitigation project and on December 1, 2017 \$2,000,000 was transferred to Pinal County. To date Asarco

has submitted a total of \$6,000,000 to Pinal County for this project. As of March 31, 2018, the County has spent \$5,892,746.85 on the project.

The project was deemed complete by EPA on March 1, 2018 when EPA advised that the \$107,253.15 left over project money would be used for future maintenance of the newly paved Camino Rio Road. Asarco and Pinal County are working on completing the final mitigation project report which will be submitted to EPA for review and approval.

LEAD-BASED PAINT ABATEMENT ENVIRONMENTAL MITIGATION PROJECT

On October 6, 2017 Asarco submitted a revised Lead Paint Mitigation Project Plan, as revised by CAG, to EPA for review and approval. Based on the comments received from EPA, Asarco submitted CAG's revised Lead Paint Mitigation Project Plan on November 17, 2017 to EPA for review and approval. Based on the comments received from EPA, Asarco submitted CAG's revised Lead Paint Mitigation Project Plan on November 28, 2017 to EPA for review and approval. Based on the comments received from EPA, Asarco submitted CAG's revised Lead Paint Mitigation Project Plan on December 14, 2017 to EPA for review and approval. On January 10, 2018 EPA approved of the December 14, 2017 version of the Lead Based Paint Abatement Project Plan. Asarco and CAG are in the process of establishing a special escrow account with a bank for this project. Since the funding is not payable to the escrow account until after the plan is approved, CAG has spent \$0.00 on the project as of March 31, 2018.

55.b Description of any non-compliance with the requirements of this Consent Decree, including those identified in Paragraph 55.a.i and an explanation of the violation's likely cause and the remedial steps taken, to be taken, to prevent or minimize such violation.

There were no issues of non-compliance during the first quarter of 2018.

### PARAGRAPH 58. REPORT CERTIFICATION

argh 1 Will

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Joseph A. Wilhelm General Manager Hayden Operations

JAW/rcg

Enclosure

F/RayEnvionmental/AIR/HaydenOps/2015AsarcoCD/QuarterlyReports/2018/1Q18.doc